

MDCLXIII.

AN ALMANACK

OF

The Cœlestial Motions for the Year of the

CHRISTIAN ÆRA

1663.

Being (in our Account) Bissextile, or Leap-year,
and from the Creation 5612.

Whose Vulgar Notes are

Golden Number 11. Cycle of the Sun 20.

Domin. Letters D.C. Roman Indict. 1.

Epoch 1. Num. of Direct. 29.

Fitted to New-England Longitude 315 gr.

and Latitude 42 d. 30 m.

By Israel Chauncy Φιλομαθης.

Felices animæ quibus hæc cognoscere primam,
Inque domos superas scandere cura fuit.

Ovid. Lib 1. Fæst.

CAMBRIDGE.

Printed by S. Green and M. Johnson. 1663.

Jonathan Mitchell 25 July 1663

The Number of Eclipses that will be visible to the Earth's inhabitants (this present year) are four : Two of the Sun and two of the Moon.

The first Eclipse will be of the Moon August 8. but will not be conspicuous to us, by reason that then she will not be risen above our Horizon; but it will be a great Eclipse in Europe, and the more Eastern Countreys.

The Second Eclipse is of the Sun, on the 22 of August which will be conspicuous in our Horizon.

Eclipse begins	1 h. 55 m. 8 sec.	} Afternoon
Greatest obscuration	3. 12. 51.	
The End	4. 22. 43.	
<hr/>		
Total duration	2. 27. 34.	
Digits Eclipsed.	9. 53.	

The Third is a small Eclipse of the Sun not exceeding 3 digits, upon the 18 of January, in the morning not visible to us, but may be seen in the more North-East parts of Great Britain.

The Fourth is a very great and Total Eclipse of the Moon upon the first day of February, which will exhibit itselfe to the more Easterne parts of the world in so much as those that live in the Oriental parts of great Tartaria, China, Japonia, &c. shall see the whole body of the Moon Eclipsed in or near their Meridian.

Besides these there will this present Year happen a Notable Conjunction of Saturn and Jupiter on the 10 day of October.

The true time of Conjunction will be Oct: 10. 7 h. 39 m. morn.

Suns place. ♈ 26 gr: 58 m. 54 sec:

Place of ♄ and ♃ from Earth 13 gr: 32 m. 34 sec: ➔

Saturne setteth 43 m past 6.

Jupiter setteth 39 m past 6.

Their whole duration above our Horizon after Sun set, will be about 1 h. 24 m. And in regard of the tardity of their motions and slowness of separation they may be seen many nights together not far from the west Horizon.

The Earth's Ingress into the four Cardinal Points.

Earth enters ☉ in ♈ March 10 day. 7 h. 41 m. 16 sec: Morn.

Earth enters ♀ in ♋ June 11 day. 10 h 35 m. Morning.

Earth enters ♄ in ♏ Sept: 13 day 13 h 39 m. Morning.

Earth enters ♊ in ♐ Decem: 11 day 1 h 20 m. Afternoon.

The second month called *April* hath xxx dayes.

- Second quarter 4 day, 40 m. past 1 at night.
- Full moon 12 day 59 m. past 4 morn.
- Last quarter 20 day, 27 m. past 8 morn.
- New moon 27 day, 06 m. past 7 morn.

M. W.	First Stars rise and set.		D	Planets Aspects
1	4 Hiculus sets 14. 09	21	Y 18	II 10 P h Lun 9
2	5 Aldbaran rises 7. 54	22	47	25 □ 2 D 7. □ 8 D 9
3	6 Orions foot set 3. 31	23	45	5 9 * 2 Lun 9
4	1 Spica virgin rises 6. 7	24	44	27 Δ 8 Lun 19
5	2 Arcturus sets 19. 44	25	43	57 6 □ 2 Lun 3
6	3 Court Combr. N-haven	26	41	20 Id h 8 Δ 10
7	4 Fomalhaut rises 17. 05	27	39	12 3 D 8 V 2 8
8	5 Sirius south 8. 38	28	38	15 Id 2 8 Δ 12 8
9	6 Antares south 14. 13	29	36	28 2 8 Lun 20
10	1 Artillery Charlistown	30	35	11 Id * Mer.
11	2 Court at Salisbury	01	33	23
12	3 Lucidaplei. sets 8. 43	02	31	11 5
13	4 Procyon rises 10. 30	03	29	17 2 longil. abest 2 0
14	5 Lucid vulturis. 10. 43	04	28	29 Δ Mer Lun 17
15	6 Os pegasi south 19	05	26	11 D Apog. 2 Lun 5
16	1 Lion's heart south 7. 15	06	24	23
17	2 Medusa's head (.10. 17	07	22	17 5 Bq 2 2 □ 2 D 17
18	3 Aldbaran sets 8. 29	08	21	17 Δ 2 8 16
19	4 Spica virg. rises 4. 51	09	18	29 Δ 2 2 9 Bq 2 2
20	5 County Court Boston.	10	16	11 2 8 Mer 14
21	6 Fomalhaut south 19. 33	11	14	24 Δ h 8
22		12	12	7 * 2 8 2 Lun 10
23		13	10	20 V 2 8
24		14	08	4 Δ h Lun 17
25		15	06	19 Vc 2 8 2 D 3
26		16	04	3 2 8
27		17	02	19
28		18	59	II 4 2 Per. 2 Lun 9
29		19	57	19 * 2 Lun 13
30		20	55	4 2 8

1	28	6	32
2	27	5	38
3	15	5	45
4	09	5	51
5	02	6	58
6	36	7	04

On the Day the Sun riseth at

The third month called May hath xxxi dayes.

- Second quarter 3 day. 35 m. past 10 at night.
- Full moon 14 day 33 m. past 8 at night.
- Last quarter 19 day 37 m. past 8 at night.
- New moon 26 day 05 m. past 2 afternoon.

M. W. Fixt. Stars rise and set.		Planets Aspects.	
1	6 Arcturus rises 3.28	26	53
2	7 Antares sets 17.11	31	50
3	1 Lucida coron. so. 13.1	22	48
4	2 Court at N-haven	23	46
5	3 Syrius rises 10.00	24	43
6	4 Lucida pipi. sou. 23.48	25	41
7	5 Procyon south 3.38	26	39
8	6 Artillery Charstown	27	36
9	3 Court ELECT. Harf.	28	34
10	4 Spica virg. sets 14.33	29	31
11	5 Aldebaran rises 5.9	30	29
12	6 Medusa head so. 23.29	01	26
13	7 Pomahane sets 22.58	02	24
14	8 Mercury Occid.	03	22
15	9 Jupiter Occident.	04	18
16	1 Saturn Occident.	05	16
17	2 Court ELECT. Boston	06	13
18	3 Court ELECT. N. have	07	10
19	4 Orion's foot sou. 23.46	08	08
20		09	05
21		10	02
22		11	00
23		12	57
24		13	54
25		14	52
26		15	49
27		16	46
28		17	43
29		18	40
30		19	37
31		20	35

On the	1	Day the Sun riseth at	4	51	And setteth at	7	00
	6		4	45		15	15
	11		4	40		20	20
	16		4	35		25	25
	21		4	30		30	30
	26		4	25		35	35

The fourth month called *June* hath xxx days.

Second quarter 2 day, 26 m. past 9 morn.
 Full moon 10 day, 23 m. past 11 morn.
 Last quarter 18 day, 23 m. past 6 morn.
 New moon 24 day, 1 m. past 9 at night.

M.W. Fixe Stars rise and set.			☉	☽	Planets Aspects.	
1	2	Artillery Elea. Boston	20	II	30	☿ Lun. 12.
2	3	Court BlECT. Plim.	21		29	* ☿ ☽ 9.
3	4	Co. N. haven	22		26	☿ ☽ Lun. 6. Vc. ☿ ☽
4	5	Quart. Court Hartford	23		23	☿ ☽ Lun. 16:
5	6		24		20	Vc. ☿ Mer.
6	7	South ballance r. 3.48	25		17	Bq. ☿ Mer.
7	1		26		15	☿ ☽ Lun. 11.
8	2	Artillery at Charltown	27		12	☿ ☽ 15. ☽ Apog
9	3	North bal. sets 16.46	28		09	Bq. ☿ Mer.
10	4		29		06	
11	5	Hydra's head sou. 3.15	00	☿	03	* ☿ ☽ 17.
12	6		01		00	* ☿ ☽ Lun. 6.
13	7	Forrhant rifles 6.8.	01		77	☿ ☽ 17.
14	1		02		54	☿ ☽ 17.
15	2	Aldebaran rises 15.4.	03		51	☿ ☽ ☽ 13.
16	3	County Co. Charls-	04		48	* ☿ ☽ Lun. 3.
17	4		05		45	* ☿ ☽ Lun. 3.
18	5	Spica virgin. sets 18.7.	06		42	☿ ☽ 14.
19	6	The S.M.M.B. Solstice	07		39	☿ ☽ 14. ☽ Perig.
20	7	Lucida pleis. to 30.52	08		36	☿ ☽ 14. ☽ Perig.
21	1		09		34	☿ ☽ 14. ☽ Perig.
22	2	Lucida coron. sou. 8.40	10		31	☿ ☽ Mer. 9.
23	3		11		28	Vc. ☿ ☽
24	4	Syrus rises 18. 28.	12		25	☿ ☽ ☽ ☽ Td ☿ ☽
25	5		13		22	* ☿ ☽ Lun. 19.
26	6		14		19	☿ ☽ Evagario max. 30
27	7	Antares sets 13. 20.	15		16	☿ ☽ Lun. 1.
28	1		16		13	Td ☿ ☽
29	2	Hircus south 21.34	17		10	Bq. ☿ ☽ ☽ ☽ ☽ 3.
30	3	Court Salem & Dover	18		06	☿ ☽ Lun. 11.

On the	{	1	Day the Sun	{	28	And setteth	{	7	32
		6			27			7	31
		11			26			7	30
		16			25			7	29
		21			24			7	28
At	{	26	risseth at	{	29	At	{	7	32
		28			7			31	
		29			7			30	

The fifth month called July hath xxxi dayes.

- Second quarter 8 d. 43 m. past 10 at night.
- Full moon 10 d. 2 m. past 2 morn.
- Last quarter 17 d. 20 m. past 1 afternoon.
- New moon 24 d. 56 m. past 4 morn.
- Second quarter 31 d. 25 m. past 2 afternoon.

M.W.Fixt Stars rise and set.			☉ ☽		Planets Aspects	
1	4	Fomalhaut rises 11.30	19	04	☿	* Mer. Lun. 2
2	5		20	02	♀	☿ ☽ 3
3	6	Spica virgin. ris. 00.14	20	59	♈	☿ ☽ 16
4	7		21	56	☊	☿ ☽ Lun. 4
5	1	Arcturus sets 13.47.	21	53	☊	☽ Apog. ☿ ☽ 17
6	2		22	50	☊	Mer. Lun. 6
7	3	Cou. N-haven & York	24	47	☊	☽ Lun. 17
8	4		25	44	☊	☽ 18
9	5	Antares South 8.16.	26	42		19
10	6		27	39	☿	* ☽ Lun. 6
11	7	Lucida Lyrae so. 20.30	28	36	☿	Mer. Lun. 7
12	1		29	32	☊	☽ Td ☽ 6
13	2	Lucida coronæ r. 11.26	00	30	* ☿	☽ 6
14	3		01	28		* ☽ Mer. 14
15	4	Syrus sets 3.12	01	25	☊	Mer. Lun. 18
16	5		02	22	☊	* ☽ ☽ 8
17	6	Medusas head so. 18.30	04	20	☊	SS. ☽ 8
18	7		05	17	☊	* ☽ ☽ 8
19	1	Lucida plei rises 21.22	06	14	☊	☽ Lun. 15
20	2		07	11	☊	☽ Lun. 4 ☽ Perig.
21	3	Procyon sets 16.07	08	09	☊	☽ 19
22	4		09	06	☊	☽ ☽ 7
23	5	Aldebaran sets 2.29	10	04	☊	☽ ☽ Mer.
24	6	Mercury Orient.	11	01	☊	☽ ☽ ☽ 8
25	7		12	58	☊	☽ ☽ ☽ 8
26	1	Virginis Spica sou. 4.9	13	56	☊	☽ ☽ ☽ 8
27	2		13	53	☊	☽ ☽ ☽ 8
28	3	County Court Boston.	14	51	☊	☽ ☽ ☽ 8
29	4		15	48	☊	☽ ☽ ☽ 8
30	5		16	46	☊	☽ ☽ ☽ 8
31	6	Antares rises 2.53	17	44	☊	☽ ☽ ☽ 8

On the { 1 } Day the Sun { 4 } 32 } And setteth { 7 } 28 }
 { 6 } { 4 } 36 } { 7 } 24 }
 { 11 } { 4 } 40 } { 7 } 20 }
 { 16 } { 4 } 45 } { 7 } 15 }
 { 21 } { 4 } 50 } { 7 } 10 }
 { 26 } { 4 } 55 } { 7 } 05 }

The sixth month called *August* hath xxxi dayes.

- Full moon 8 day 35 m. past 3 afternoon.
- ☾ Last quarter 15 day 58 m. past 6 at night.
- New moon 22 day 46 m. past 7 afternoon.
- ☽ First quarter 30 day 16 m. past 8 morn.

M.V First Stars rise and set.				Planets Aspects.				
1	7	North ballan. sou. 5.30	18	♂	41	♂	28	* ♀ Lun 8
2	1		19	♂	39	♂	16	Apog.
3	2		20		37	♂	21	Δ ♀ Mer. ferē.
4	3	Court at New-haven.	21		34	♂	3	Td ♀ h. * ♀ ♀ 2
5	4		22		32	♂	15	* ♀ Mer. 15
6	5	Arcturus sets 11. 40	23		29	♂	28	Mer Lun. 16
7	6		24		27	♂	10	* ♀ h ♀ 12
8	7	Eclips ♀ in conspicua	25		25	♂	23	□ Lun. h 7
9	1	Hircus rises 7. 21	26		23	♂	6	♀ longif. 2. ☉ abest.
10	2		27		20	♂	19	Δ h ♀ 2
11	3	COMMENCEMENT.	28		19	♂	2	♀ 2
12	4	Lucida coron. fo. 5.16	29		16	♂	16	Vc ♀ ♂ * ♂ ♀ 10
13	5		30	♂	14	♂	29	Δ Mer. Lun. 11
14	6	Syrius rises 14. 58	01		12	♂	13	♂ ♀ Lun 13
15	7		02		10	♂	27	♂ Perig. * ♀ ♀ 9
16	1		03		08	♂	11	Td ♀ ♀
17	2	Procyon sets 3. 33	04		06	♂	25	□ ♀ Lun. 18
18	3	Lucida plei. sou. 17. 3	05		04	♂	10	□ ♀ ♀ 6 Td h. ♀
19	4		06		02	♂	24	Vc ♀ h. ♂ * ♀ ♀ 4
20	5	Lucida Lyrz sou. 7. 42	07		00	♂	8	* ♀ Lun 1
21	6		07		58	♂	22	* ♀ Lun. 8
22	7	Eclipsus ☉ visibilis.	08		57	♂	6	□ Lun: h 15
23	1		09		55	♂	10	Bq ♀ ♂
24	2	Fomahant rises 8. 6	10		53	♂	3	♂ ♀ Lun: 10
25	3		11		51	♂	17	♂ ♀ Mer: 10
26	4	Aldebaran sets 24. 31	12		50	♂	29	□ ♀ ♀ 8. * ☉ ♀
27	5		13		48	♂	12	♂ ♀ Mer: 10
28	6	Virginis Spica f. 8. 48	14		46	♂	24	□ h ♀ 8. * ☉ ♀
29	7		15		45	♂	6	♂ Apog. Bq h. ♀
30	1	South ballan. ris. 10. 18	16		43	♂	18	* ♀ Lun. 9.
31	2		17		41	♂	22	♀ 2

On the	1	Day the Sun riseth at	5	And setteth at	16	58
	6		5		6	
	11		5		6	
	16		5		6	
	21		5		6	
	26		5		6	25

The eighth month called *October* hath **xxxi** dayes.

● Full moon the 6 day, 39 m. past 3 afternoon.
 Last quarter 13 day, 30 m. past 7 morn.
 New moon 20 day, 28 m. past 6 at night.
 First quarter 28 day, 45 m. past 10 at night.

M, W, Fixt Stars rise and set.		☉	☽	Planets Aspects	
1	5 Aldebaran rises 8.10	18	11	13	* h Lun. 9
2	6	19	11	16	h 9p
3	7 Hircus south 15.37	20	10	* 9	☐ ☿ Lun. 5
4	1 Pomahant sets 23.15	21	10	12	
5	2 Arcturus rises 5.16	22	10	Y 5	Δ ☿ Lun. 1.
6	3 Court Cambridge New	23	09	20	SS ☿. SS h Mer.
7	4 [haven & Plim	24	09	☽ 4	☐ ☿ Lun. 5
8	5 Antares south 2.36	25	09	19	
9	6	26	09	II 4	Conjunct. mag. h 28
10	7 Hercules head so. 3.35	27	09	18	
11	1	28	09	☽ 3	
12	2 Orions foot sou. 14.20	29	09	17	Δ Mer. Lun. 6
13	3 Court at Hampton.	30	09	Ω 1	Δ ☿ Lun. 13
14	4	31	09	15	☐ Mer. Lun. 15
15	5 Spice virgin. ris. 17.45	02	03	28	☽ ☿. * ☉ Lun 5
16	6	03	09	☿ 12	* ☿ Lun. 5
17	7 Syrius sets 11.17	04	09	25	* Mer. Lun. 3
18	1	05	09	☿ 8	* ☿ Lun 5.
19	2 Procyon south 17.6	06	09	21	
20	3	07	09	☿ 3	☉ Elong. max. 2 ☉
21	4 Medusa's head rises 3.6	08	10	16	Δ ☿ 17
22	5	09	10	28	☿ Apog.
23	6 Lucida plei. sets 30.27	10	10	10	☿ Td ☉ ☿
24	7	11	11	32	SS ☉ ☿
25	1 Hircus rises 2.36	12	11	Yp 4	
26	2	13	11	16	* Mer. Lun. 18
27	3 County Court Boston.	14	12	27	SS ☉ h. ☿ ☿ Lun. 18
28	4	15	12	☿ 9	☿.
29	5 Lucida Coron. so. 0.29	16	13	32	SS ☉. Td ☿ ☿
30	6	17	13	* 4	☐ h Lun. 1.
31	7 Lucida Lyrz sou. 3.19	18	14	17	

On the	{ 1	Day the Sun riseth at	{ 6	And setteth at	{ 5	33
	{ 6		{ 6		{ 5	
	{ 11		{ 5		{ 5	
	{ 16		{ 6		{ 5	
	{ 21		{ 5		{ 5	
	{ 26		{ 7		{ 5	00
			{ 00			

The ninth month called *November* hath xxx dayes.

- Full moon 5 day 8 m. past 2 morn.
- Last quarter 11 day, 44 m. past 5 at night.
- New moon 19 day, 14 m. past Noon.
- First quarter 27 day, 14 m. past 4 afternoon.

M. W. First Stars rise and set.		Planets Aspects.	
1	1 Hircus rises 3. 8	19	M 14
2	2	10	15
3	3 Court at New-haven.	21	16
4	4	12	16
5	5 Antares sets 5. 3	23	17
6	6	24	18
7	7 Fomahant sets 10. 52	25	19
8	8	26	19
9	9 Arcturus rises 14. 59	27	20
10	10 Lucida Lyræ fou. 2. 38	28	21
11	11	29	22
12	12 Mercury Orient.	30	23
13	13 Lucida coron. ris. 15. 29	01	24
14	14	02	24
15	15 Spica virgin. ris. 15. 37	03	25
16	16 Venus Orient.	04	26
17	17	05	27
18	18 Orions foot fou. 12. 31	06	28
19	19	07	29
20	20 Hercules head fou 0. 32	08	30
21	21 Medusa's head ris. 1. 00	09	31
22	22	10	32
23	23	11	34
24	24 Court at Salem.	12	35
25	25	13	36
26	26 Sirius sets 18. 12	14	37
27	27	15	38
28	28 Lucida plei. south 10. 16	16	39
29	29 North ballancer. 16. 24	17	40
30	30 South ballan. sets 2. 29	18	42

On the	1	Day the Sun riseth at	7	08	And setteth at	4	52
	6		7	12		4	47
	11		7	18		4	42
	16		7	23		4	37
	21		7	27		4	33
	26		7	29		4	31

The eleventh month called January hath xxxi days

- Full moon 2 day about 11 at night.
- Last quarter 9 day 22 m. past 10 at night.
- New moon 18 day 4 m. past 3 morn.
- First quarter 25 day 9 m. past 6 at night.

M. W. Fixt Stars rise and set				Planets Aspects			
1	6	Lucida vult. sets 6. 32	21	Vp 12	II 19	D	Perig.
2	7		22	24	45	Sa	☉ ☿
3	1	Syrius south 10. 31	23	25	50	Δ	☿ Lun. 14
4	2		24	26	55	☿	Lun. 12
5	3	Court at New-haven.	25	27	29	☐	☿ Lun. 19
6	4		26	28	13	☐	☿ Lun. 9
7	5	Medusas head ris. 9. 32	27	30	27	☐	☿ Lun. 9
8	6		28	31	12	☐	☿ Lun. 4
9	7	Spica virg. south 17. 2	29	32	24	Bq	☿ ☿ ☐ ☿ Lun. 4
10	1		30	33	6		
11	2	Lucida ploi. sets 14. 49	01	34	18	Vc	☉ ☿
12	3		02	35	30	Vc	☉ ☿
13	4	Mercury Occident.	03	36	12	☉	☉ Mer. 14
14	5		04	37	24	☉	☉ Mer. 14
15	6	Procyon rises 1. 19	05	38	6	Td	☉ ☿ ☐ ☿
16	7		06	39	18	☉	☉ ☿ ☐ ☿
17	1	Antares sets 23. 47	07	40	30	☉	☉ Mer. Lun. 10
18	2		08	41	12	☉	☉ Lun. 9
19	3	Arcturus south 19. 14	09	42	24	☉	☉ Lun. 9
20	4		10	43	7	☉	☉ ☿ ☐ ☿
21	5	Aldebaran south 7. 22	11	44	19	☐	☉ Lun. 7
22	6		12	45	2	☉	☉ Lun. 11
23	7	Pomahant sets 5. 21	13	46	15	Δ	☉ ☿ ☐ ☿
24	1		14	47	28	☉	☉ Mer. 12
25	2	South ball sets 22. 27	15	48	11	☉	☉ Mer. 12
26	3	Counry Court Boston.	16	49	25	☉	☉ Mer. 12
27	4		17	49	9	II	☉
28	5	North ballan. ris 12. 8	18	50	24	D	Perig.
29	6		19	51	8	Δ	☉ ☿ ☐ ☿
30	7	Orions foot sou. 7. 28	20	52	22	☉	☉ ☿ ☐ ☿
31	1		21	52	8	☉	☉ ☿ ☐ ☿

On the	1	Day the Sun	2	25	And setten	4	35
	6		7	22		4	38
	11		7	17		4	41
	16		7	12		4	48
	21		7	07		4	53
	26		7	01		4	59

The twelfth month called *February* hath xxix dayes

Full moon 1 d. about 10 morn.
 1st quarter 8 d. 56 m. past 4 afternoon.
 New moon 16 d. 33 m. past 8 at night.
 First quarter 24 d. 22 m. past 2 morn.

M. W. First Stars rise and set		Planets Aspects.	
1	2	22	33
3	3 Co. N. haven. ♂ Dec.	23	34
3	4	24	34
4	5 Fomahant sets 4. 34	25	35
5	6	26	35
6	7 Aldebaran rises 11. 20	27	36
7	1	28	36
8	2 Arcturus south 16. 3	29	37
9	3	00	37
10	4 Lucida plei. sou. 7. 12	01	38
11	5	02	38
12	6 Procyon rises 5. 37	03	38
13	7	04	39
14	1 Medusa's head set. 13. 43	05	39
15	2	06	39
16	3 Virgin. Spica ris. 9. 13	07	39
17	4	08	39
18	5 Hircus south 5. 36	10	00
19	6	11	00
20	7 Syrius sets 12. 46	00	00
21	1	12	00
22	2 North ball. rises 10. 37	14	00
23	3	15	00
24	4 South ball. sets 20. 39	16	00
25	5	17	00
26	6 Hydra's head sou 10. 6.	18	00
27	7 Mercury Orient.	18	59
28	1	19	59
29	2	20	59

On the { 1 } Day the Sun { 52 } And setteth { 5 } 08
{ 6 } { 6 } { 46 } { 5 } 14
{ 11 } Day the Sun { 6 } 38 { 5 } 22
{ 16 } riseth at { 6 } 37 { 5 } 28
{ 21 } { 6 } 24 { 5 } 36
{ 26 } { 6 } 17 { 5 } 42

The Theory of Planetary Orbs.

WHether there be solid Orbs yea or no, hath bin an ancient question among Astronomers. The Answer to which is usually affirmative. Nevertheless, for the resolving of it, we shall in the first place set down three Arguments of the Noble *Tycho Brahe*, whereby he labours to refel the solidity of Planetary Orbs. His first Argument is taken from the motion of Comets: for if there were solid Orbs, Comets could not passe from one Orb to another; now that they do, is evident by his, and many other Astronomers, Observations.

The second is taken from the irrefraction of the rayes of the Stars: for, if the Orbs were more solid then these lower parts of the Heavens, then the rayes of all the Stars would be refracted before they come to our sight (according to that rule in Opticks, *Radius lucis per se rectus occurſu tamen medii diverſi frangitur, &c.*) and therefore the Stars or planets would appear irregular in motion, and in places far distant from their true places in the Heavens, & nothing could truly be observed concerning their motions, &c. *Tycho's* last Reason is accommodated to his own Principles (as well as to those of *Copernicus*) that *Mars* is sometimes nigher to the Earth then the *Sun*; which could not be, if there were solid Orbs, seeing the Orb of \textcircled{J} must needs cut the Orb of the \textcircled{S} .

Furthermore, if there were solid Orbs, then there must be empty spaces for the Planets to move in, which be not solid (unless we should grant a penetration of Bodies) and then there must be distances between the Orbs; which the Authors of this Tenent do deny: For they say (and that truly) *Totum Cælum est*

ὁμοιομερές secundum omnes sui partes. Again, if there be solid Orbs, then they be coloured; and if coloured, then visible. Now the Planets and Stars are coloured, (which according to them are but the more tenuous parts of the Heavens;) which if so, then the Orbs must be also coloured, Nam *homogeneorum homogenea est natura*. Yea, which is a greater absurdity, the Stars should be all of the same colour; *Quia namque lumen semper induit colorem medii, dum istud trajicit, eoque sic infectum transit adulterino colore præditum*.

Lastly, (though much more might be added) if the Orbs were solid, there should never be night: For there can be no solidity in the Orbs, let them be never so pellucid, but there would be a repercussion of light in them, and repercussed light would hinder the being of the night: for the species of the Body of the Sun (being beaten back as it were in a Looking-glass) would always be seen.

The Natural Portents of Eclipses according to approved Authors.

Eclipses, according to the Judgment of Ptol. lib. 2. chap. 8. operate more efficaciously in such places where they are Vertical; or where the chief Significator, shall passe by their Zenith in the time of the Eclipse. Now in Prognosticating the effects of Eclipses, it is warily to be observed in what Asterism the Eclipse happens: If it represent the form of Men, the influence will fall chiefly upon Men; if of four footed Beasts, on them, &c. *Alsted.* And hence it is that Scaliger calls them *Changēres temporum & morum.* Eclipses in the fiery Triplicity Menace sharp Wars, mutual grudges between the more Noble and Ignoble; Pestilent diseases, Famines, &c. especially in those places subject to the Sign Eclipse.

2 When there shall happen an Eclipse of either Luminary in the Earthly or Humane Triplicity, there follows scarcity of fruits and Corne, *Quippe quod spicasera, Virgo & arator Taurus, & impios Cayē hujusmodi fructus comedere & devastare consueverunt.*

3 In the airy and humane Triplicity, it presageth Famine and Pestilent Diseases, and commonly brings Tempestuous and stormy Winds. 4 In the watery Triplicity it shews the death of common and ignoble people, daily motions of Wars by Sea and Land, &c. *Junctinus. fol. 209. de Eclipsibus.*

Besides these the Lord of the Eclipse is many times a great cause of events following the Eclipses: as, *H* of pitchy Clouds, Snow, violent Stormes, &c. *P* Health and Tranquility &c. *T* Tumults, Dilations, Thunder Lightning &c. *Q* generally the same with *P* *Q* dry Diseases, Coughs, Consumptions &c. *Alsted.*



